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# TRANSNATIONAL WORKING GROUP ON THE DYNAMICS OF CONFLICT

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This report summarizes the last six month's activities of a group of thirteen social psychologists from U. S. and European universities, who are informally confederated for the purpose of discussing and conducting joint investigations of human conflict. The research consists primarily of experimental studies of conflict between individuals and small groups. The broad goal of the group is to develop general theories of conflict dynamics and process which have applicability to conflicts between individuals, small groups, organizations and nations.

One significant finding of recent research (cf. Section 1) concerns an experimental comparison of student samples at UCIA (California), Aixen-Provence (France), Louvain (Belgium) and Dartmouth (New Hampshire). Behavior in a simple interpersonal relationship provided an opportunity to analyze differences among the subjects in each sample in their orientations toward one another. The major dimension of such individual differences was found to be different for the various samples. At UCLA and Aix, the main dimension was identified to be "social interaction" orientation. Subjects at these sites were different from one another primarily in the degree to which they attempted to use their power in a contingent manner, doing to the other person what he had done to them (tit-for-tat). At the other two sites, all subjects were uniformly high on a tit-for-tat orientation and the major dimension of difference among them was their degree of generosity toward each other. Among other implications of this result (noted in the report), its significance for the practical negotiator is to be highlighted: As he moves from one counterpart to another, the major respects in which he will find them to differ, one from another will not be constant (nor necessarily similar to what he might have experienced in his own culture), but will depend upon the particular population in which he is moving.

A summary is presented of the initial results of a large experimental study of bargaining behavior, conducted at eight different sites (three in Europe and five in the U.S.) with a total of 320 pairs of subjects. The study (cf. Section 2) reveals that the amount of conflict present in bargaining is reduced as the stakes are increased. Agreement is more quickly and dependably achieved. It is recognized that increased importance of stakes does not always have this positive effect upon the bargaining process. However, the present data and the possibilities they afford (by virtue of their number and heterogeneity) for internal analysis promise to be an important addition to the growing body of scientific evidence bearing on this important question: What is the relation between importance of the issues and amount of conflict generated?

This study also reveals a consistent difference between U. S. and European samples in amount of time required to settle the bargaining problems. The European pairs require more time and, the evidence suggests, are inclined to be more active in the bargaining situation. This is one aspect of the many variations in orientations and approaches to

bargaining problems which the study reveals and which are being subjected to more systematic analysis. For example, it appears that certain European bargainers can achieve moderately good accommodations to each other despite laving fairly negative and hostile attitudes at the outset of the relationship. Among U. S. subjects, initial attitudes seem to have greater value as a predictor of interaction outcomes.

Theoretical discussions of the Working Group are summarized as are plans for future research on bargaining between representatives of groups.

#### 1. Research on information acquisition under conflict.

Research using mixed-motive bargaining situations has generally provided subjects with full information about costs and payoffs associated with the bargaining alternatives. In many bargaining situations, however, a person is not fully informed about the costs to his opponent of the latter's offers nor of the utility to the opponent of one's cwm offers. In such situations, it is of interest to know under what conditions persons will be motivated to gain the missing information. One subgroup of the Working Group (Flament, Kelley, Lanzetta, Nuttin and Tajfel), at an early conference, designed an experiment to examine behavior in this type of setting. The bargaining task required two subjects to exchange "tokens" on each of a number of trials. Each was aware of the costs to himself of sending a particular token, and of the value to him of a token received from the other party, but he did not know initially the value of a token sent to the other party or the costs to the other of a token received. He was permitted to purchase, at a fixed cost, as much of this missing information as he desired. Although two subjects were physically present, unknown to them an experimenter totally played the role of the other party for both subjects, delivering a standard series of tokens to each. The independent experimental variables were (1) whather the partner (in reality, the experimenter) behaved in a friendly or hostile manner on early trials, and (2) whether the instructions emphasized the importance of the task or not. This experiment was completed at four different sites: Louvain, Aix-en-Provence, UCIA, and Dartmouth College.

During the experiment, subjects were asked to explain their actions toward the other party, i.e., why they sent the particular tokens they did. Flament has recently subjected the answers to these questions to scale analysis, using a particular type of analysis he has been developing. He discovered some consistent trends within the questionnaire data which are related to the tokens the subjects choose to send and which cut across the several experimental conditions. Both the questionnaire and behavioral data differentiate between the Aix and UCIA data, on the one hand, and the Louvain and Dartmouth data, on the other. At the former sites (Aix and UCIA) subjects are differentiated by the questionnaire items with respect to their degree of "social interaction" orientation to the relationship. By this is meant their intending to use their tokens in a contingent manner, depending upon what the other party gives them. Subjects who describe their orientation in these terms are found indeed to use their tokens in this manner, sending ones

of high value after receiving tokens of high value and returning low value tokens in exchange for low ones received. At the opposite end of the scale are subjects who report little interest in returning what the other person gives them and who, in fact, give tokens of low—tue each time without regard for what they have received. At the other two sites, subjects are not consistently differentiated with respect to a contingent "social interaction" approach. They all tend to endorse the idea of "tit-for-tat" and to use their resources in this manner. They do, however, tend to be differentiated with respect to their generosity toward the other subject, i.e., the value of token they are willing to give him (though they are generally more generous than the Aix and UCIA subjects).

Further analysis of these variables is in progress, directed particularly to an investigation of the relation between these variables and the acquisition of information. Prior to having these final results, we can suggest several possible implications of the present data which are of considerable importance for our research and for conflict theory in general.

- (a) Our samples of university students differ in the factors (personality predispositions), relevant to social interaction, with respect to which there is within sample variance. We had fully expected differences in mean levels (which also appear in these data) but had not expected differences in variances (or in "factorial structure," so to speak). The differences are probably interpretable in terms of different recruitment and selection policies at the several institutions (so that, for some reason, Aix and UCIA tap a broader range of the population on the "social interaction" variable). In any case, these differences indicate the importance of analyzing co-variation of attitudes and behavior within-samples as a basis for interpreting between-sample differences.
- (b) The data suggest a correlation between (1) degree of contingent orientation toward the other player, making one's own behavioral choices in the light of his, and (2) degree of generosity in actions taken toward the other. This correlation appears within the Aix and UCIA samples and as a between-sample correlation comparing the Aix-UCIA pair with the Dartmouth-Louvain pair. (The pattern of results, which cuts across U. S. and European sites, does much to eliminate translation and other spurious methodological interpretations of the relationship.) The first variable would seem to indicate a person's readiness to adopt a controlling approach to the partner, attempting to shape or train him by contingent use of one's own power to reward or punish him. Interpreted in these terms, the correlation suggests there to be a general positive correlation between attempted control and willingness to be generous to the person over whom the control is exercised. This, in turn, brings to mind the Locus of Control Scale, constructed and used by Jules Rotter, Melvin Seeman (1963), and others. In this scale, there is assumed to be a correlation of this sort, specifically between feelings of control over one's fate and optimism about the quality of outcomes one can expect to receive from one's environment. Whichever of these variations in interpretation are

placed upon our results, the generalization, if proven to be sound, is of great importance for theories of conflict. Conflicts are not resolved between parties who do not try to exercise their respective means of control over one another. If such attempts are also generally made by persons with optimistic expectations, the possibilities of successful resolution are greatly heightened. Thus, the degree to which a person's orientation to a relationship involves the contingent use of his control may be doubly predictive of the outcomes. One should hasten to add (to underline the tentativeness of this interpretation) that the Locus of Control Scale has been a successful predictor of individual or pair negotiation behavior in the few studies where it has been used (e.g., Shure and Meeker, 1967), although the interaction settings have differed in significant respects from the present one.

### 2. "International" bargaining experiment.

The experimental task employed in this study involves two persons in a typical mixed-motive bargaining situation where each one's information is limited only to his own payoffs. On each of 30 trials, the pair is given a joint value (a contract) which they can have if they can agree on how to divide it between themselves. Each one is also assigned an independent value which specifies what he receives if they fail to reach agreement about a division of the contract. The contract values and independent values vary unpredictably from trial to trial, so each time each person does not know what the other's independent value is. It is to their mutual benefit to agree on a division of each contract because after an uninterrupted succession of such agreements (and as long as they sustain it), the entire set of values increases for them both. On the other hand, it is often in a person's short term individual interest to take his independent value inasmuch as it represents more than he can possibly hope to gain from the contract. In any event, a person with a high independent value (or who can convince his opponent it is high) will be tempted to use it as a basis for obtaining a lion's share of the contract, as his price for agreeing to a division. This fact means that the relationship/be subjected repeatedly to stress by the threat of non-agreement and by problems arising from misrepresentation and distrust.

From this brief description, it can be seen that participants may deal with the relationship in a variety of ways ranging from active, trial-by-trial bargaining, to the development of norms or rules for making contracts, to avoiding confrontation by repeatedly opting for the independent values. In the course of active bargaining, a range of tactics is available including threats, promises, honest sharing of information, deceit and misrepresentation, and appeals to the future. The task was designed particularly for the purpose of revealing different orientations toward bargaining relationships and different patterns of tactics employed in the course of bargaining.

This task has been used at eight sites: Louvain, (Belgium), Paris (France), Utrecht (Holland), Chapel Hill (University of North Carolina), Los Angeles (UCIA), Hanover, New Hampshire (Dartmouth College), New

York (Columbia University), and Santa Monica (System Development Corporation) with 10 dyads per cell in a 2 x 2 experimental design (high vs. low incentive--money vs. points, and equal vs. unequal dependence--average independent values that are equal or unequal for members of a dyad.

Since the initiation of the present research grant, whe results of all eight sets of data have been analyzed at SDC (though detailed final analysis remains to be done) and a working summary of the results (prepared by Kelley) was discussed at the Sorrento Conference (see below). The major results to be noted at this point are as follows:

(a) Effects of Incentives: In the high incentive condition, subjects received small amounts of money which depended upon the outcome of their negotiations. (The amounts actually obtained were in the neighborhood of five dollars per subject.) In the low incentive condition, subjects simply received point scores as in bridge or a game. The effects of this variation are clear and highly significant statistically. In the money condition, agreements to divide the contract values were more frequent. This effect varies somewhat among the eight sites but there is not a significant interaction (in an analysis of variance) between site and incentive on this variable. Less bargaining time was also required under the high intentive conditions but here there was a significant interaction with site. Money lengthened somewhat the time used at Dartmouth and Columbia but it reduced the time, and sharply so, at the three European sites. Analysis of behavior during the interaction shows that the beneficial effects of the high incentive were mediated by more frequent discussion (and formation) of rules, more frequent invocation of these rules, and less frequent "hard" bargaining, misrepresenting the independent value, etc. Psychologically, these benefits seem to derive from subjects adopting a longer time perspective (focusing an long run gains, reported in a post-game questionnaire) and being more concerned with helping each other and both receiving a fair and equal share (instead of being concerned with outdoing one another or simply maximizing one's own score). At least in part these effects of money are produced prior to the interaction: the pre-game ratings of typical person and self in the game are more cooperative under bigh incentives. This raises the question of whether all of the incentive effect is a matter of different pre-game attitudes induced by money. The answer to this awaits further analysis.

What kind of relationship is beneficially affected by an increase in the stakes? Other experiments relley, et al., 1965, and Daniels, 1967) as well as our common sense tell us that not all relationships are so affected. The present experiments add another bit of evidence concerning this important question. It is hoped that our internal analyses, within each sample, will add clarity here. This particular game, although generally a mixed-motive one, seems to evolve toward cooperation as it unfolds: In even the low incentive condition (though not as much as in the high) the subjects increase in positive attitudes toward each other from pre-ratings to post.

- (b) Equal vs. Unequal Dependence: In the first, the two subjects' independent values were, on the average, equal. In the later, one's values were, on the average, higher than the other's. This variation was intended to reveal the effects of asymmetrically-operating stress upon the relationship. The effects of this variable were complex and preliminary close analysis suggests we inadvertantly co-varied another and different variable, viz., the difficulty of early trials (the first five being crucial). Further analysis, directed more closely at the behavior on specific items, is being conducted.
- (c) The Different Sites: The average number of times pairs agreed on a division of the contracts ranged from approximately 19 to 24 (out of 30 trials) over the 8 sites, a statistically significant effect. The order of the eight, from nighest (most agreement) to lowest is SDC, CDL, Utrecht, Paris, UCLA, DART, UNC, and Louvain. Note that there is not a U.S.-European difference on this variable (which is the principal measure of the amount of cooperation the bargainers were able to achieve) and the same is true of most of the other measures. The main exception concerns amount of time required for the negotiation. This is longest at the three European sites and shortest at the five U. S. sites. The average time at Paris (72 seconds per trial) is twice that at SDC and UCIA (34 seconds in each case). This might be interpreted as a procedural difference, for example, that experimenters in Europe are accustomed to conduct experiments at a more leisurely pace and convey this attitude to the subjects. However, differences among the sites in pre-game ratings indicate the time differences probably lie with the subjects and not the experimenters: The average pre-game activity ratings (of the typical player and of themselves in the game) are higher at the three European sites than at the U. S. ones. Inasmuch as activity fills time, both sets of data indicate that the negotiation situation elicits more active bargaining with European subjects. As noted above, the high incentive (money) reduces time used in bargaining and it does so particularly for the European sites.

Another U. S.-European difference appears in examining the degree to which the pre-game level of cooperativeness in a given sample (indicated by ratings of typical person and self in the game) predicts the amount of agreement achieved during the game. There is the expected positive correlation over the five U. S. samples but not over the three European ones. The latter departure from expectations is illustrated by the Paris and Utrecht samples. The former expect little cooperation from the typical player but manage to do well despite this. The Utrecht sample rates the typical player as bein, highly cooperative (second only to SDC) but are able to agree no better than the Paris sample ( and far less often than the SDC sample). These betweensample correlations must be evaluated in the light of within-sample analyses which still remain to be done. (And, as our data from the information acquisition study indicate, the latter correlations may well be different for different samples.) However, the striking thing about these first results is the variation they reveal between samples in subjects' ability to attain good outcomes despite unfavorable initial expectations. Samples with very similar pre-game ratings

of cooperativeness (e.g., Louvain and Paris) are quite different in the degree of mutual profit they realize from the actual bargaining.

Much analysis and interpretation remains to be done for the complex set of data derived from this study. An intimation of what may be expected from the full analysis can be given by a brief interpretive resume of the pattern of results at each of the sites. These are arranged from most to least successful in overall bargaining outcomes.

SDC: Very favorable pre-game expectations. During negotiation frequent invoking of rules (about fair share, maintaining agreement, etc.). App mently, little discussion was necessary to arrive at these rules; they appeared quickly or perhaps, by tacit agreement. Very little misrepresentation, threat, or refusal to bargain. They maximized their scores by playing it safe (suggested by large drop in selfratings of "strong," from pregame to post).

COL: Similar to above except that initial expectations of each other are rather negative. This apparently had little negative carryover to the interaction itself, perhaps because the moderate amount of rule discussion sufficed to reduce concern and generate workable norms. They do not seem to regard their cooperative behavior as weakness (as SDC seems to).

UCIA: Very mixed pattern, difficult to interpret. These seem not to be bargaining types, to dislike the game, and to be eager to get it over.

PARIS: Beginning with negative expectations of the other party, and rarely resorting to rules during the interaction, these subjects manage nevertheless to achieve moderately good outcomes. Their bargaining is active, flexible, and entails a good deal of misrepresentation. However, it is non-aggressive (there as little threat) and the view of the other player improves markedly during the course of the interaction.

<u>DART</u>: Also a mixed, inconsistent pattern. Generally oriented toward outdoing the other person. The admittedly competitive and ruthless crientation becomes more pronounced with money.

UTRECHT: Begins with rather favorable expectations and intentions which apparently are not viable. They discuss rules a great deal but also very frequently depart from them. A rederately competitive orientation seems to emerge during play.

<u>UNC</u>: The initial high expectations of competitiveness interfere with the evaluation of rules and produces a strong tendency for misrepresentation and mistrust. Their competitiveness increases during the game

LOUVAIN: Begins with negative expectations of the other person and a very positive picture of themselves, similar to that at Paris. Here, however, this pattern results in highly aggressive bargaining

behavior with little development of rules, much misrepresentation, and a high degree/threat (far higher than at any other site). The competition confirms the negative view of the opponent but is apparently not considered incompatible with their positive self-images.

The results of this study have been discussed by the Working Group and it is clear that they are open to a variety of interpretations. Within-sample analysis is being made to determine what are some of the major variations in approach and behavior among the subjects at each site. Our goal of identifying and measuring different orientations to bargaining situations will not be fully achieved by an analysis of these data, no matter how thorough, but we count on this study as a source of empirical hypothesis about such orientations which can then be tested in subsequent experiments and surveys.

### 3. Sorrento Meeting

Over a five-day meeting of the entire Working Group, the topics described below were discussed. These discussions were held for the purpose of promoting development of theory and hypotheses, sharing information about current research, and considering possible further lines of research for the Working Group itself.

- (a) Methodology of research on conflict: The problem of interpreting differences between the samples studied at different locales, the detection and reduction of spurious differences, the generation of hypotheses about cross-cultural differences in bargaining behavior, and the relative merits of the two strategies of studying particular kinds of conflict versus studying conflict-in-general.
- (b) Conflict limiting norms: The discussion proceeded from a theoretical paper on this topic prepared by Dean Pruitt especially for the meeting. Discussion concerned behavioral vs. subjective definition of norms, the relation between norms and views of reality ("world views"), the role of norms in the resolution of conflict (as in Thibaut and Faucheus's work, 1965, and the Working Group's "International" bargaining study), and the special difficulties of resolving conflicts which involve a clash of different "world views."
- (c) Leadership in social change: The discussion concerned conflict between a leader (or minority) and the majority of a group, and the variables affecting the ultimate acceptance of the minority view by the entire group. An important (but complex) variable was suggested to be the consistency of the minority.
- (d) Minority group conflict: The preceding discussion led into an analysis of conflict between subgroups within a larger group. The specific topics were the engendering of conflict by subgroups in order to improve their internal organization, the conditions under which a majority yields up some of its power to a weaker minority, and conditions affecting the amount of open conflict surrounding this redistribution of power.

(e) Intergroup relations and group structure: Closely related to the above topic was this one which included the effect of intergroup conflict upon internal group cohesiveness, the differential effect of such conflict upon high vs. low status members, the relevance of conflict induced perceptions of similarity and interdependence to internal cohesiveness, and multiple membership and intergroup contacts in relation to loyalty felt toward one's nation and primary groups.

# 4. Projected Research on Bargaining between Representatives of Groups.

In the course of the general discussions of the Working Group at Sorrento, a decision was made to take as the next topic for the Group's work that of bargaining between representatives of groups. This represents the conjunction of two of the major interests of the members of the Working Group (as evidenced in the discussion topics above): intergroup relations and bargaining. Initial discussion of the problem area at Sorrento led to the conclusion that inasmuch as most conflict resolution between groups takes place between group representatives, our work should focus on this phenomenon. Particularly important aspects of the problem concern (1) the relationship of the representative to his own group: his power within the group, the degree to which his interests are similar to those of the other members, his ability to communicate persuasively with them, and the type of mandate and authority they have given him; (2) the relation of the representative to his counterpart: his sensitivity and responsiveness to the needs of the other party, his concern about maintaining good relations, his skill at applying pressure through portrayal of his commitments to his own group, and his skill at proposing compromise which avoids involvement of broad, ideological issues; and (3) changes in these variables: e.g., increasing orientation to the other group and alienation from own group's interests.

A committee consisting of Jaap Rabbie and John Thibaut is preparing a working paper on this topic which will be circulated and evaluated by all the members before the next general meeting. This paper will be the major focus for discussion and research planning at that meeting.

As part of the committee's work, Thibaut has recently developed a specific proposal for research in which the task involves the choice of arguments for a bargaining session. The task concerns a small group faced with a forth-coming negotiation session between their representative (one of them) and the representative of a similar opposing group. The proposed research will attempt to determine how the group's selection of a set of arguments for the session is affected by (1) varying degree of common interest between the group and the opposing group, and (2) the group's relation with and attitudes toward the position they are advocating, whether it is their own position and they believe in its intrinsic merits or they are representing another organization and advocating the position simply because they are hired to do so. (In the latter case, the entire small group is acting as an agent for a larger organization.)

In the proposed investigation, the representative and the other group members can be compared as to the types of arguments they favor and the group acting instrumentally (as a mere agent for a larger group) can be compared with the one acting on its own behalf. The procedure for investigating these problems has been developed and has undergone one initial pretesting.

#### References

- Daniels, F. V. Communication, incentive, and structural variables in interpersonal exchange and negotiation. <u>J. exp. soc. Psychol.</u>, 1967, 3, 47-74.
- Kelley, H. H., Condry, J. C., Jr., Dahlke, A. E., and Hill, A. H. Collective behavior in a simulated panic situation. J. exp. soc. Psychol., 1965, 1, 20-54.
- Seeman, M. Alienation and social learning in a reformatory. Amer. J. Sociol., 1963, 69, 270-284.
- Shure, G. H., and Meeker, R. J. A personality/attitude schedule for use in experimental bargaining studies. J. Psychol., 1967, 65, 233-252.
- Thibaut, J. W. and Faucheux, C. The development of norms in a bargaining situation under two types of stress. J. expt. soc. Psychol., 1965, 1, 89-102.